MA222. Schedule for the Summer 2010 semester.

May 202.1-2.2 in [1]Introduction to Probability. Sample space, events, probability axioms and propertiesMay 242.3 in [1]Counting principles, combinatorial methods,(M)2.1,2.2 in [2]Permutations, combinations.(T)2.3, 2.4 in [2]Permutations, combinations.(T)2.3, 2.4 in [2]Counting principles, leaves theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.(R)May 27Commencement day. No classes.(R)Memorial day Holiday. No classes(M)Jun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	Lecture	Textbook	Topics
(R)1.1-1.4 in [2]and propertiesMay 242.3 in [1]Counting principles, combinatorial methods,(M)2.1,2.2 in [2]Permutations, combinations.May 252.3 in [1]Permutations, combinations.(T)2.3, 2.4 in [2]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.May 27Commencement day. No classes.(R)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1]Special cases of discrete random variables: Bernoulli, Binomial, 5.1-5.3 in [2]Jun 3 (R)(cont)	May 20	2.1-2.2 in [1]	Introduction to Probability. Sample space, events, probability axioms
May 242.3 in [1] 2.1,2.2 in [2]Counting principles, combinatorial methods,(M)2.1,2.2 in [2]Permutations, combinations.(T)2.3, 2.4 in [2]Permutations, combinations.(T)2.3, 2.4 in [2]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.(R)Memorial day Holiday. No classes(M)Jun 1 (T)3.1-3.3 in [1]Jun 2 (W)3.4-3.6 in [1]Jun 3 (R)Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.	(R)	1.1-1.4 in [2]	and properties
(M)2.1,2.2 in [2]May 252.3 in [1]Permutations, combinations.(T)2.3, 2.4 in [2]Permutations, combinations.May 262.4,2.5 in [1]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.May 27Commencement day. No classes.(R)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1]Special cases of discrete random variables: Bernoulli, Binomial, 5.1-5.3 in [2]Jun 3 (R)(cont)	May 24	2.3 in [1]	Counting principles, combinatorial methods,
May 252.3 in [1]Permutations, combinations.(T)2.3, 2.4 in [2]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.(R)Memorial day Holiday. No classes(M)Jun 1 (T)3.1-3.3 in [1]Jun 1 (T)3.1-3.6 in [1]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1]Special cases of discrete random variables: Bernoulli, Binomial, 5.1-5.3 in [2]Jun 3 (R)(cont)	(M)	2.1,2.2 in [2]	
(T)2.3, 2.4 in [2]May 262.4, 2.5 in [1]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.May 27Commencement day. No classes.(R)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	May 25	2.3 in [1]	Permutations, combinations.
May 262.4,2.5 in [1] 3.1-3.5 in [2]Conditional probability, Bayes theorem, Independence(W)3.1-3.5 in [2]Commencement day. No classes.(R)Memorial day Holiday. No classes(M)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	(T)	2.3, 2.4 in [2]	
(W)3.1-3.5 in [2]May 27 (R)Commencement day. No classes.May 31 (M)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	May 26	2.4,2.5 in [1]	Conditional probability, Bayes theorem, Independence
May 27 (R)Commencement day. No classes.May 31 (M)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	(W)	3.1-3.5 in [2]	
May 31 (M)Memorial day Holiday. No classesJun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	May 27 (R)		Commencement day. No classes.
(M)Jun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Jun 3 (R)Cont	May 31		Memorial day Holiday. No classes
Jun 1 (T)3.1-3.3 in [1] 4.1-4.6 in [2]Discrete random variables, Distribution functions. Expectation and variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Discrete random variables. Standardization.Jun 3 (R)(cont)	(M)		
4.1-4.6 in [2]variance of discrete variables. Standardization.Jun 2 (W)3.4-3.6 in [1]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	Jun 1 (T)	3.1-3.3 in [1]	Discrete random variables, Distribution functions. Expectation and
Jun 2 (W)3.4-3.6 in [1] 5.1-5.3 in [2]Special cases of discrete random variables: Bernoulli, Binomial, Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)		4.1-4.6 in [2]	variance of discrete variables. Standardization.
5.1-5.3 in [2]Geometric, Negative Binomial. The Poisson distribution.Jun 3 (R)(cont)	Jun 2 (W)	3.4-3.6 in [1]	Special cases of discrete random variables: Bernoulli, Binomial,
Jun 3 (R) (cont)		5.1-5.3 in [2]	Geometric, Negative Binomial. The Poisson distribution.
	Jun 3 (R)		(cont)
Jun 7 (M)4.1-4.2 in [1]Continuous random variables, PDF, CDF. Functions of random	Jun 7 (M)	4.1-4.2 in [1]	Continuous random variables, PDF, CDF. Functions of random
6.1-6.3 in [2] variables. Expectation and variance.	1 1	6.1-6.3 in [2]	variables. Expectation and variance.
Jun 8 (T) (cont)	Jun 8 (T)		(cont)
Jun 9 (W) 4.1-4.4 in [1] Special cases of continuous random variables: Uniform distribution, 7.1-7.5 in [2] normal exponential (Gamma and Beta - time permitting)	Jun 9 (W)	4.1-4.4 in [1] 7 1-7 5 in [2]	Special cases of continuous random variables: Uniform distribution,
lun 10 (R) Catching un lecture TEST 1 on Eeb 27 to cover material from the first	lup 10 (R)	7.1 ⁻ 7.5 m [2]	Catching un lecture TEST 1 on Feb 27 to cover material from the first
3 weeks.	5011 10 (II)		3 weeks.
Jun 14 (M) See handouts Special Lecture: The Poisson process.	Jun 14 (M)	See handouts	Special Lecture: The Poisson process.
Jun 15 (T) (cont)	Jun 15 (T)		(cont)
Jun 16 (W) 5.1-5.2 in [1] Distribution of two random variables. Joint and conditional	Jun 16 (W)	5.1-5.2 in [1]	Distribution of two random variables. Joint and conditional
8.1-8.3 in [2] distributions.		8.1-8.3 in [2]	distributions.
Jun 17 (R) (cont)	Jun 17 (R)		(cont)
Jun 21 (M) 11.1, 11.4, 11.5 in Moment Generating Functions. Characteristic Functions. Limit	Jun 21 (M)	11.1, 11.4, 11.5 in	Moment Generating Functions. Characteristic Functions. Limit
[2] Theorems. Central Limit Theorem.		[2]	Theorems. Central Limit Theorem.
Jun 22 (T) (cont)	Jun 22 (T)		(cont)
Jun 23 (W) (cont)	Jun 23 (W)		(cont)
Jun 24 (R) Catching up. TEST 2 on April 9 to cover material up to and including	Jun 24 (R)		Catching up. TEST 2 on April 9 to cover material up to and including
week 10			week 10
Jun 28 (M) 1.1-1.4 in [1] + STATISTICS: Describing distributions using graphs. Sample. Mean,	Jun 28 (M)	1.1-1.4 in [1] +	STATISTICS: Describing distributions using graphs. Sample. Mean,
iecture notes Variance, Quantiles.	lup 20 (T)	ecture notes	Variance, Quantiles.
Juli 27 (1) 0.1-0.2 III [1] Point Estimation. Methods of point estimation. Jun 20 (M) 7.1.7.2 and 8.1.8.2 Confidence Intervals and testing based on a single nervilation.	Jun 20 (\A/)	0.1 - 0.2 [1]	Confidence Intervals and testing based on a single non-ulation
in [1] sample	JUII 30 (VV)	in [1]	confidence intervais and testing based on a single population sample
lul 1 (R) Review	Jul 1 (R)	[±]	Review

Jul 5 (M)	Independence Day – No classes
Jul 6 –Jul 9	Review and Final Exam period for the summer semester
	FINAL EXAM on (?) to cover material from the entire course

References:

[1] Jay L. Devore, "*Probability and Statistics for Engineering and the Sciences*", seventh edition, Duxbury, 2007

[2] Saeed Ghahramani *"Fundamentals of Probability with Stochastic Processes",* third edition, Prentice Hall, 2004